

**TESTIMONY OF
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**ON THE EFFECTS OF WASHINGTON AQUEDUCT DISCHARGES
ON THE ENDANGERED SHORTNOSE STURGEON**

**BEFORE THE
COMMITTEE ON RESOURCES
U.S. HOUSE OF REPRESENTATIVES**

June 19, 2002

Good morning, Mr. Chairman and members of the Committee. Thank you for the opportunity to testify today on the status of shortnose sturgeon in the Potomac River, and the effects of the discharges from the Washington Aqueduct on its population and habitat. This issue is of great interest and concern to NOAA just as it is to this committee. We look forward to working with Congress, other Federal agencies, and the citizens of the area to identify and implement appropriate programs to conserve species and aquatic habitats.

Background

Shortnose sturgeon exists in rivers and bays of eastern North America from Canada to Florida. It is an anadromous species, which means that it lives in slow moving river waters or nearshore marine waters, but migrates periodically to fresher water to spawn. The shortnose sturgeon was listed as endangered under the Endangered Species Preservation Act on March 11, 1967, and subsequently listed under the Endangered Species Act (ESA) of 1973. The National Marine Fisheries Service (NMFS) has sole jurisdiction for protecting shortnose sturgeon under the ESA.

Shortnose Sturgeon in the Chesapeake Bay and Potomac River

Prior to 1996, the most recently documented evidence of shortnose sturgeon in the Potomac was from 1899. The best available information suggested that the species was extirpated from the

Potomac River. Most of the shortnose sturgeon captured recently in the Chesapeake Bay have been in the upper Bay, north of Baltimore, close to the Chesapeake and Delaware Canal. Between 1996 and 2002, six shortnose sturgeon were captured in the lower and middle tidal Potomac River during a U.S. Fish and Wildlife Service (FWS) reward program for Atlantic sturgeon (see attached map). These shortnose sturgeon were captured between 55 and 123 miles downstream of the Washington Aqueduct's Little Falls discharge.

In addition to the reward program for Atlantic sturgeon, the FWS conducted two sampling studies between 1998 and 2000 in the Maryland waters of the Chesapeake Bay to determine the occurrence of shortnose and Atlantic sturgeon in areas of proposed dredge-fill operations. One of these studies included surveys at five sites located in the middle Potomac River approximately 30 to 74 miles downstream of the Washington Aqueduct discharge site. During this study, no shortnose sturgeon were captured. A second much more limited study included sampling at two areas in the vicinity of Little Falls, Virginia, which are environments that are consistent with the preferred spawning habitat of shortnose sturgeon in other rivers and are located near the Aqueduct discharge sites. No shortnose sturgeon were captured during this study.

To date, no Shortnose sturgeon have been documented in the area of the Aqueduct discharge sites. There is also no documentation of shortnose sturgeon spawning anywhere in the Potomac River. However, the FWS study that was performed near Little Falls was limited in scope due to adverse river conditions. In addition, shortnose sturgeon are inherently difficult to capture and often there is little evidence of their presence in river systems. NMFS and the Environmental Protection Agency (EPA) have, therefore, made the precautionary assumption that shortnose sturgeon may be present and spawning in the vicinity of the Aqueduct and may be affected by the discharges. This assumption is based on the following information: (1) Recent captures of shortnose sturgeon in downstream reaches of the Potomac River; (2) The presence of habitat near Little Falls that is consistent with known shortnose sturgeon spawning habitat in other rivers; and (3) Known migratory and spawning behavior of shortnose sturgeon in other rivers for which NMFS has more information.

Washington Aqueduct ESA Section 7 Consultation History

Prior to 1996, the best available information indicated that shortnose sturgeon were extirpated from the Potomac River. Therefore, while concerns about the effect of the Washington Aqueduct's discharge on water quality, fish, and other aquatic life existed prior to 1996, the impacts to shortnose sturgeon specifically were not considered. The recent captures of shortnose sturgeon during the FWS reward program represented new scientific information that NMFS and other agencies had to consider, resulting in the initiation of consultation pursuant to section 7 of the ESA in spring, 2001.

EPA and NMFS pursued "informal" section 7 consultation, as defined by NMFS' regulations, for over a year on the issuance of a National Pollutant Discharge Elimination System (NPDES) permit for the Washington Aqueduct to determine the possible effects of the Aqueduct discharges on shortnose sturgeon. While the consultation is not yet complete, NMFS has already recommended that the EPA permit contain a condition that no discharges be allowed during the spawning period for shortnose sturgeon. EPA has included this recommendation as a condition of their draft NPDES permit. NMFS reviewed a draft of the permit and provided written comments to the EPA on March 27, 2002.

The Army Corps of Engineers (Corps), operator of the Washington Aqueduct, funded a three-year water quality study to assess the discharge from the Aqueduct and its effects. The study report was published in October 2001. EPA used the discharge study results, among other available information, to develop a draft biological evaluation (BE) on the potential impacts of the Washington Aqueduct discharges on shortnose sturgeon. After NMFS review of EPA's draft BE and subsequent discussions, EPA and NMFS have agreed to enter into "formal" consultation, which will culminate in NMFS providing its biological opinion (BO) regarding the possible effects of the permit on shortnose sturgeon. The BO may include measures to minimize adverse effects on shortnose sturgeon.

Clarifications on Sturgeon Biology and the Consultation Process

We are concerned that there may be several important misconceptions in regards to sturgeon biology and our ongoing consultation with the EPA. We appreciate the opportunity to further clarify these issues.

Misconception 1 - Little Falls is the sole spawning ground for the shortnose sturgeon.

We are aware of reports and comments indicating that the Little Falls area is the sole spawning area of the shortnose sturgeon. This statement is not true. Shortnose sturgeon exist as 19 distinct populations that occupy and spawn in rivers and bays from Canada to Florida. In addition, the Potomac River is just one of several tributaries in the Chesapeake Bay drainage that appears to have suitable habitat for shortnose sturgeon. Other rivers that appear to have suitable spawning habitat for the Chesapeake Bay population of shortnose sturgeon include the York, Rappahanock, Patuxent, James, Susquehanna, and Gunpowder Rivers.

Without a doubt, more research is needed to fully understand the extent to which the shortnose sturgeon may or may not rely upon the Little Falls area for spawning habitat.

Misconception 2 - Discharges from the Aqueduct are responsible for the lack of sturgeon recovery in the Chesapeake Bay.

Some reports have strongly suggested that the Aqueduct discharges are responsible for the lack of shortnose sturgeon recovery in Chesapeake Bay. NMFS recognizes that water quality may be one of several factors affecting shortnose sturgeon recovery. However, the facts do not support isolating discharges from the Aqueduct as a primary factor affecting shortnose sturgeon recovery in the Chesapeake Bay. As noted above, the Potomac River is just one of several rivers in the Chesapeake Bay drainage that appear to have suitable habitat for shortnose sturgeon. However, no recovery of shortnose sturgeon has been observed in any river in the Chesapeake Bay drainage (see attached map). Therefore, it appears that some natural and/or anthropogenic factor(s) other than sediment discharges into the Potomac may be limiting this species' ability to recover in the Chesapeake Bay.

It is interesting to note that the Hudson River, which supports the most healthy and increasing shortnose sturgeon population, is not pristine. Studies have identified 183 separate industrial and municipal discharges in the Hudson and Mohawk Rivers, including chemical and oil industries, power plants, and sewage and wastewater facilities. In spite of these less than ideal water quality conditions, the Hudson River population of

shortnose sturgeon has grown to approximately 60,000 individuals and appears to be on its way toward recovery.

Misconception 3 - NMFS is not consulting with the EPA on the effects of Aqueduct discharges on shortnose sturgeon.

NMFS has been criticized by some for being slow to react to the ramifications of the discovery of shortnose sturgeon in the lower Potomac. In light of this, I want to assure you that NMFS will make every effort to be as thorough as possible during the consultation process.

NMFS has been engaged in an "informal" section 7 consultation with the EPA since spring 2001 regarding EPA's issuance of a NPDES permit for the Aqueduct discharges. Now NMFS and EPA are in "formal consultation." Formal consultations generally must be completed within 135 days.

ESA consultations occur in two stages as defined in NMFS' ESA section 7 regulations: the informal consultation and the formal consultation. Any section 7 consultation is triggered by Federal actions that "may affect" a listed species or critical habitat (50 CFR 402.14). Typically, an action agency will first engage in informal consultation. Informal consultations include all discussions and correspondence between NMFS and Federal action agencies that are designed to assist NMFS and the action agency in assessing the effects of the action on the listed species. If NMFS concurs with the action agency that the action is not likely to adversely affect the listed species, the consultation process ends at the informal stage (50 CFR 402.13). However, if NMFS determines that the action is "likely to adversely affect" a listed species, NMFS will recommend that the action agency enter into formal consultation. Alternatively, as EPA has done in this case, an action agency may choose to proceed directly to the formal consultation stage at any point in the process.

Misconception 4 - NMFS has the authority and obligation to shut down Federal operations that may adversely affect an endangered species.

In 1982, Congress amended the ESA to authorize Federal agencies to adversely affect threatened or endangered species and even

"take" threatened and endangered species as long as the actions are not likely to jeopardize the continued existence of the listed species, the "take" is not the intended purpose of the action, and the impact is minimized. As a result of these amendments, section 7(b)(4) directs NMFS to issue "incidental take statements" for any take NMFS anticipates, if the action is not likely to jeopardize the listed species that would be "taken." Section 7(o) of the ESA exempts such taking from acts that are prohibited by section 9 of the ESA. There are several examples of incidental take statements issued in the past that "authorize" takes resulting from sediment discharges into the spawning areas of threatened or endangered fish.

To conclude, NMFS takes its responsibility to protect endangered aquatic species seriously. The discovery of the shortnose sturgeon in the lower Potomac will require additional research by federal agencies, including NMFS, into its habitat and into actions that could adversely impact the existence of the species. I look forward to working closely with Congress and other agencies for the protection of this species. Thank you for the opportunity to provide this testimony.